

Teacher Lesson Materials Worksheet

This assessment tool provides teachers with the information necessary to assess computer science lesson materials* for their alignment with the Kapor Center's Culturally Responsive-Sustaining CS Education Framework (CRCS Framework) Core Components. Teachers can use this tool to assess any lessons they are using with students in the classroom. After reading over the instructional unit being used and viewing all materials used within a lesson, teachers can do a "quick check" of the lesson against the Kapor Center CRCS Framework's six core components. Teachers will be able to assess if the lesson aligns with all core components with a quick yes, no, or unsure answer to better guide the beginning of an entire process of reflection on their instruction and pedagogy. Extra space is provided for teachers to make any notes while examining the lesson against the culturally responsive-sustaining computer science practices pulled directly from the Kapor Center CRCS Framework. Definitions of terms used and additional resources can be found below the worksheet portion of the checklist.

*Lesson materials can include the following: discussion questions, formative assessments, exit tickets, videos, worksheets, software, supplementary resources, articles, essential questions/learning targets, and we do/you do exercises.

CRCS Core Component	Lesson Materials Standard	Status	Notes
CC I (Acknowledge Racism in CS and Enact Anti-Racist Practices) CC III (Pedagogy and Curriculum are Rigorous, Relevant, and Encourage Sociopolitical Critiques)	Includes at least one example of addressing/mentioning racism, race/ethnicity, racial inequity, racial justice and/or involves the decentering of whiteness	1 1 0 1 0 0 0 0 0 1 0 1 0 1 0 1 1 1 0 1 1 0 0 0	11010011 10010110 00011000 01011101 10100011
CC II (Create Inclusive and Equitable Classroom Culture)	Includes the opportunity to explore/discuss identity markers (i.e. race, ethnicity, gender, nationality, socioeconomic status, disability, etc.) and the negative -isms (ableism, racism, sexism, classism, etc.) associated with certain identity markers	111010 001011 101100 011101 001110	0 1 1 0 1 0 0 1 0 0 1 0 1 1 0 0 0 1 1 1 0 0 0 1 0 0 1 1 0 1 0
CC III (Pedagogy and Curriculum are Rigorous, Relevant, and Encourage Sociopolitical Critiques)	Prompts teachers to have ongoing feedback loops throughout the lesson	110001	00000000
CC IV (Student Voice, Agency, and Self- Determination are Prioritized in CS Classrooms)	1001110100111 1010011101001 001011000101	0 1 0 0 1 1 1 1 0 1 0 0 0 0 0 1 0 1	10001110 11010011 10010110



Teacher Lesson Materials Interactive Worksheet (Cont.)

CRCS Core Component	Lesson Materials Standard	Status	Notes
CC III (Pedagogy and Curriculum are Rigorous, Relevant, and Encourage Sociopolitical Critiques)	Provides one or more opportunities for students to lead/facilitate activities and/or collaborate with peers	011000	10100010
CC IV (Student Voice, Agency, and Self- Determination are Prioritized in CS Classrooms)	0101100010110 0110001011000 111010011101	001011 101100 011101	0 0 1 0 1 1 0 0 0 1 1 1 0 0 0 1 0 0 1 1 0 1 0
cc I (Acknowledge Racism in CS and Enact Anti-Racist Practices) cc III (Pedagogy and Curriculum are Rigorous, Relevant, and Encourage Sociopolitical Critiques)	Prompts educators and/or students to critically examine ethical, societal, and political implications of technology/computing	0 0 1 1 1 0 1 1 1 1 1 1 0 0 0 0 0 0 1 1 0 0 0 1 1 0 0 0 1 0 0 1 0 0 1 1	10111010 11111111 00000000 01000101 11001011
CC V (Family and Community Cultural Assets are Incorporated into CS Classrooms)	Prompts educators to consult or include community and/or family perspectives into the lesson	000101	1001011
CC II (Create Inclusive and Equitable Classroom Culture)	Accessible to a variety of students with differentiation, accommodations, modification, enrichment, and/or extension suggestions designed from the start and provided	011000	10100010
CC VI (Diverse Professionals and Role Models Provide Exposure to a Range of CS/Tech Careers)	Prompts educators to incorporate diverse experts and expose students to a large variety of computing professionals and careers	101100	01110001



Appendix 1. Key Terms (Cont.)

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Accommodation: alteration of the environment, curriculum format, or equipment which improves access to content and/or completion of tasks

Accessibility: the ability of a device, product, service, or environment to be usable by as many people as possible

Culturally Responsive-Sustaining CS Pedagogy: ensures that students' interests, identities, and cultures are embraced and validated, students develop knowledge of computing content and its utility in the world, strong CS identities are developed, student, family, and community voices and experiences are validated, and students engage in larger socio-political critiques about technology's purpose, potential, and impact.

Differentiation: an educational strategy that meets the diverse learning needs of students in the classroom with the goal that all students are able to successfully master content, skills, and standards of lessons

Enrichment: expanded learning opportunities and time for students that need extra support to master skills and content

Extension: expanded learning opportunities and time for students that need increased opportunities to be challenged and creatively think about skills and content

Identity: the collective set of characteristics by which a person is known by or can be grouped; identity characteristics can be visible and invisible (hidden)

Identity markers: categories that provide belonging for people; examples include disability, age, race, ethnicity, gender, nationality

Modification: change in the curriculum which can include reduced tasks and/or amount of content needed to master

Racism: a system of dominance power, and privilege based on racial group designations, occurring where dominant group members create or maintain structures, ideologies, values, or behavior that have the intent or effect of leaving the non-dominant group members excluded from power, esteem, status and/or equal access to societal resources. There are four types of racism: individual

(interpersonal) racism, internal racism, institutional racism, and structural racism.

Racial inequity: an issue of social justice that involves racial discrimination and prejudice that affects a racial group's ability to find work, get access to healthcare, and receive an equal education

Racial justice: the act of preserving, seeking, or extending rights to people who have historically been denied their rights on the basis of race

White Supremacy: the ideology that white people and the ideas, thoughts, beliefs, and actions of white people are superior to non-white people. White supremacy is ever present in our institutional and cultural assumptions that assign value, morality, goodness, and humanity to white people while casting non-white people and communities of color as worthless, immoral, bad, and inhuman.

Whiteness: itself refers to the specific dimensions of racism that serve to elevate white people over non-white people. Whiteness is conceptualized as a constellation of processes and practices rather than as a discrete entity. These processes and practices include basic rights, values, beliefs,

perspectives, and experiences purported to be commonly shared by all but actually only consistently afforded to white people. Whiteness is dynamic, relational, and operating at all times and on various levels.



Appendix 2. References

ACLU

Ed Glossary

Education Reimagined

Kapor Center Culturally Responsive-Sustaining Computer Science Education: A Framework

Learning for Justice

NEA EdJustice

Race Forward

Racial Equity Tools

Appendix 3. References

3 Ways to Build Student Agency into Your Lessons

10 Tips for Developing Student Agency

ADA Standards for Accessible Design

Bringing STEM Guest Speakers into the Classroom - EVERFI

Creating an Identity-Safe Classroom | Edutopia

Connecting accessibility, third-party curriculum and student success

Determining the Accessibility of K12 Digital Materials: Tools for Educators

Disability Equality Education Project (DEE)

Embedded EthiCS

Fostering Family Engagement in Middle and Secondary Schools

Fostering Identity Safety in Your Classroom | Edutopia

Involvement or Engagement? | ASCD

Making the Most of Guest Speakers in the Classroom | Top Hat

National Center on Accessible Educational Materials

Personal Identity: Crash Course Philosophy #19

REAL-CS Initiative

Student agency | Renaissance

Using Collaborative Learning to Build Student Agency | Edutopia

Web Accessibility Laws That Affect K-12 Schools

When Educators Understand Race and Racism | Learning for Justice

What do we mean by race, ethnicity, and diversity? | The Tilford Group

Toolkit: Identity Development

Universal Design for Learning Guidelines

What is Ableism? Teachers Share 8 Things They Wish the World Understood



Appendix 3. References (Cont.)

Culturally Responsive-Sustaining Education Framework (New York Department of Education)

Culturally Responsive Computing: A Theory Revisited (Scott, et al., 2015)

Culturally Relevant CS Pedagogy: From Theory to Practice (Madkins et al., 2020)

Culturally Responsive Teaching: Theory, Research, and Practice (Gay, 2000)

Culturally Responsive Teaching and the Brain (Hammond, 2014)

Culturally Sustaining Pedagogy: A Needed Change in Stance, Terminology, and Practice

(Paris, 2012)

Culturally Sustaining Pedagogy: A Critical Framework for Centering Communities

(Alim, Paris & Wong, 2020)

Cultivating Genius: An Equity Framework for Culturally and Historically Responsive Literacy

(Muhammad, 2020)

Embedding and Sustaining Inclusive Practices in STEM (McPherson et al., 2019)

Ethics, Identity, and Political Vision: Toward a Justice-Centered Approach to Equity in Computer

Science Education (Vakil, 2018)

Exploring Intersectionality in Education: The Intersection of Gender, Race, Disability, and Class

(Petersen, 2006)

Good Teaching? An Examination of Culturally Relevant Pedagogy as an Equity Practice

(Schmeichel, 2012)

It's About Power: A Call to Rethink and Equity in Computing Education

(Vakil & Higgs, 2019)

Mapping the Margins: Intersectionality, Identity Politics, and Violence Against Women of Color

(Crenshaw, 1991)

Preparing for Culturally Relevant Teaching (Gay, 2001)

Toward Culturally Responsive Computing Education (Eglash et al., 2013)

Toward a Theory of Culturally Relevant Pedagogy (Ladson-Billings, 1995)

Undoing Ableism: Teaching About Disability in K-12 Classrooms (Baglieri & Lalvani, 2019)

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